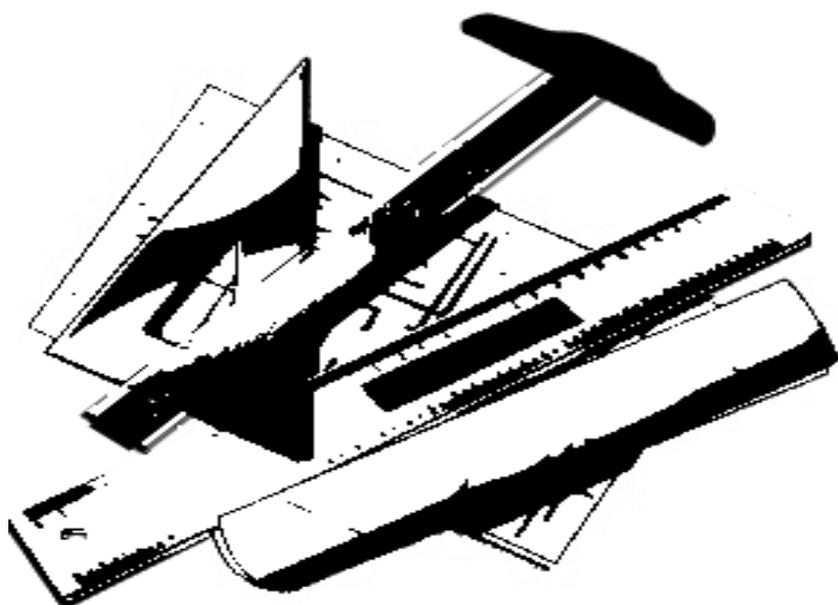


KS3

Specification

2017/18



DESIGN

TECHNOLOGY



DEAN TRUST *Wigan*

- ❖ **Tools and Equipment**
- ❖ **Health & Safety**
- ❖ **Timbers and Manufactured Boards**
- ❖ **Graphics, Colour Theory and Typography**
- ❖ **Packaging**
- ❖ **Wood Joints**
- ❖ **Paper Engineering**
- ❖ **Metals and Properties**
- ❖ **Manufacturing Techniques**
- ❖ **CAD CAM**
- ❖ **Design Styles over the past 100 years**
- ❖ **Designing Techniques**
- ❖ **Plastics and Properties**
- ❖ **Planning for Manufacture**
- ❖ **Paper Engineering**
- ❖ **Sustainability**

Year 7 Formal Assessment

- 1. Baseline Assessment**
- 2. Materials/Timbers Knowledge**
- 3. Tools & Equipment / Health and Safety**
- 4. Product Analysis and Key Terminology**
- 5. Joining Techniques**
- 6. Graphics Knowledge**

Year 8 Formal Assessment

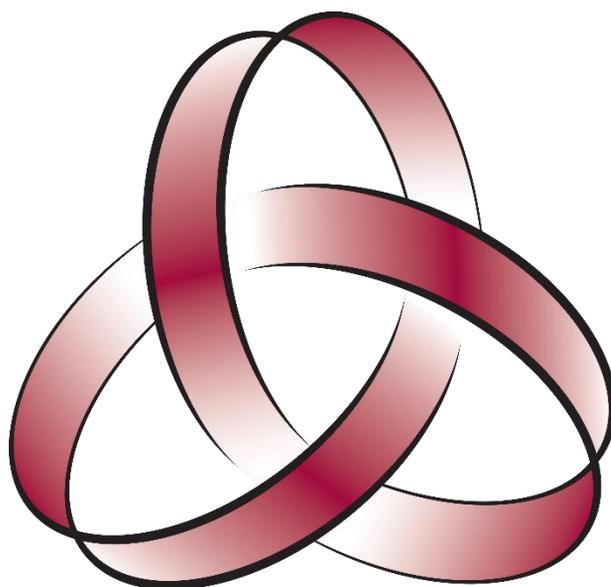
- 1. Tools & Equipment**
- 2. Manufacturing Techniques**
- 3. Metals and Properties**
- 4. Plastics**
- 5. Manufacturing Techniques**
- 6. Product Analysis**

Band Descriptors

Y7		Band 1	Band 2	Band 3	Band 4
		Pupil is able to sort equipment into subject areas. They can draw their favourite project with some consideration to presentation. It is identifiable. They can evaluate their project relating to WWW and EBIs	Pupil can reflect on their prior learning and explain uses of different materials they have used and in what projects. They have considered the presentation of their idea by rendering. They can evaluate a project overall considering what they have enjoyed and how their product could be improved.	Pupils are able to explain the different tools and equipment for different jobs. They have also communicated their favourite project effectively with annotations. When evaluating they can reflect on skills they have learnt.	Pupil has a sound understanding of tools, equipment and materials. Their favourite project is well-presented and communicated and drawing in 3D. The pupil is able to evaluate their project including justifications for decisions made and also consider feedback from peers.
Autumn 2	Picture Frame	The pupils have shown understanding of the context and researched similar products and produced a mood board with some annotation.	The pupils have analysed the task, showing understanding of the context and highlighting areas they will research. They have included research of similar products and produced a mood board, explaining how it will inspire their own ideas.	They have demonstrated subject knowledge of both materials and manufacturing techniques relevant to the product.	They have undertaken primary research in the form of a questionnaire or an interview to demonstrate the needs of their client. They have reflected on their research to produce a detailed specification with justifications that shows their learning/findings.
Spring 1		The pupil has worked mostly independently and safely, with an understanding of tools and equipment. Their product is completed.	The pupil has demonstrated a variety of manufacturing techniques, using 2 or more materials. They have completed their product working mostly independently and safely. They have demonstrated a good understanding of tools and equipment, selecting them and using them appropriately.	The pupil has produced a manufacturing plan of how they have made their product. They have worked safely (by selecting the appropriate tools) and worked mostly independently demonstrating using two or more materials and manufacturing techniques.	They have produced a completed product to a high quality standard, demonstrating some understanding of quality control. They have incorporated CAD/CAM when making (where possible)
Spring 2		Their design ideas are unique, creative and show imagination. They have shown variety and written a specification that is relevant and covers a variety of aspects.	They have produced a variety of ideas (approx.4) which they have evaluated through annotation stating their likes and possible developments. Their ideas are rendered and also written a specification that reflects their research.	Their design ideas are drawn in 3D, with dimensions included. They have communicated their ideas effectively with annotations reflecting their knowledge of materials and manufacturing techniques.	When designing they have reflected on their specification and also produced a model of their final idea.
Summer 1	Toy Boat	The pupil has worked mostly independently and safely, with an understanding of tools and equipment. Their product is completed.	The pupil has demonstrated a variety of manufacturing techniques, using 2 or more materials. They have completed their product working mostly independently and safety. They have demonstrated a good understanding of tools and equipment, selecting them and using them appropriately.	The pupil has produced a manufacturing plan of how they have made their product. They have worked safely (by selecting the appropriate tools) and worked mostly independently demonstrating using two or more materials and manufacturing techniques.	They have produced a completed product to a high quality standard, demonstrating some understanding of quality control. They have incorporated CAD/CAM when making (where possible)
Summer 2	Pop Up Card	Pupil has undertaken primary research and investigated paper mechanisms by creating models.	Pupils have produced variety in Ideas and added annotation to help show their thought process and development of ideas.	Pupil has communicated their ideas effectively and considered presentation techniques such as typography and guidelines.	Pupil has communicated their ideas effectively considering presentation, they have annotated with justification and rendered effectively. They have demonstrated an element of creativity.

Band Descriptors

Y8		Band 1	Band 2	Band 3	Band 4
Autumn 1	Wind chimes	The pupils have analysed the task, showing understanding of the context and highlighting areas they will research. They have included research of similar products and produced a mood board, explaining how it will inspire their own ideas. They have produced a variety of ideas (approx.4) which they have evaluated through annotation stating their likes and possible developments. Their ideas are rendered and also written a specification that reflects their research.	They have demonstrated subject knowledge of both materials and manufacturing techniques relevant to the product. Their design ideas are drawn in 3D, with dimensions included. They have communicated their ideas effectively with annotations reflecting their knowledge of materials and manufacturing techniques.	They have undertaken primary research in the form of a questionnaire or an interview to demonstrate the needs of their client. They have reflected on their research to produce a detailed specification with justifications that shows their learning/findings. When designing they have reflected on their specification and also produced a model of their final idea (this could include CAD)	The pupil has been able to independently research an area that is relevant to the project. They have also completed primary research in the form of a product disassembly taking into consideration a variety of aspects of ACCESS FM. The pupil has been able to communicate their design ideas by hand drawings and with CAD. They have evaluated their model and considered it in relation to the brief, specification and also highlighted possible developments. Their design ideas are effectively communicate through annotations (using ACCESS FM)
Autumn 2		The pupil has demonstrated a variety of manufacturing techniques, using 2 or more materials. They have completed their product working mostly independently and safety. They have demonstrated a good understanding of tools and equipment, selecting them and using them appropriately.	The pupil has produced a manufacturing plan of how they have made their product. They have worked safely (by selecting the appropriate tools) and worked mostly independently demonstrating using two or more materials and manufacturing techniques.	They have produced a completed product to a high quality standard, demonstrating some understanding of quality control. They have incorporated CAD/CAM when making (where possible)	The pupil has produced a flowchart (including symbols) to show the manufacturing of their product. Their product has been completed with an appropriate finishing technique.
Spring 1		The pupil has evaluated the project overall, demonstrating what they have learnt.	They have evaluated what makes their product successful and outlining possible modifications.	They have considered feedback from their client and peers to make possible suggestions for modifications.	They have tested their product against their specification with justifications detailing where it meets each point, and why it may not meet other aspects.
Spring 2	Design Styles	The pupils have analysed the task, showing understanding of the context and highlighting areas they will research. They have included research of similar products and produced a mood board, explaining how it will inspire their own ideas.	They have demonstrated subject knowledge of both materials and design styles. Their design ideas are drawn in 3D, with dimensions include. They have communicated their ideas effectively with annotations reflecting their knowledge of materials and manufacturing techniques.	They have undertaken primary research in the form of a questionnaire or an interview to demonstrate the needs of their client. They have reflected on their research to produce a detailed specification with justifications that shows their learning/findings.	The pupil has been able to independently research an area that is relevant to the project. They have also completed primary research in the form of a product disassembly taking into consideration a variety of aspects of ACCESS FM.
Summer 1		They have produced a variety of ideas (approx.4) which they have evaluated through annotation stating their likes and possible developments. Their ideas are rendered and also written a specification that reflects their research.	Their design ideas are drawn in 3D, with dimensions include. They have communicated their ideas effectively with annotations reflecting their knowledge of materials and design style influences.	When designing they have reflected on their specification and also produced a model of their final idea.	The pupil has been able to communicate their design ideas by hand drawings and with CAD. They have evaluated their model and considered it in relation to the brief, specification and also highlighted possible developments. Their design ideas are effectively communicate through annotations (using ACCESS FM)
Summer 2		The pupil has demonstrated a variety of manufacturing techniques, using 2 or more materials. They have completed their product working mostly independently and safety. They have demonstrated a good understanding of tools and equipment, selecting them and using them appropriately.	The pupil has produced a manufacturing plan of how they have made their product. They have worked safely (by selecting the appropriate tools) and worked mostly independently demonstrating using two or more materials and manufacturing techniques.	They have produced a completed product to a high quality standard, demonstrating some understanding of quality control. They have incorporated CAD/CAM when making (where possible)	The pupil has produced a flowchart (including symbols) to show the manufacturing of their product. Their product has been completed with an appropriate finishing technique.



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